

REMARKS/ARGUMENTS

With entry of this amendment, claims 47-64 are pending. Claims 1-46 have been canceled, and claims 47-64 added. Support for new claims 47-64 is found, for example, in the specification, for example, at paragraphs 16, 17, 18 and 27, and in claims 30-46. No new matter is added by these amendments. No claim amendment should be construed as acquiescence in any ground of rejection.

Information Disclosure Statement

Applicants submitted a first information disclosure statement ("IDS") on May 6, 2004 (references AA-BO) and a supplemental IDS on May 18, 2004 (references BP-DH). Both IDSs were captured at the PAIR page for this application. Applicants have not received an acknowledged copy either IDS. Applicants respectfully request the Examiner acknowledge both IDSs.

Rejections Under 102(e) and 102(e)/103

Claims 30-46 stand rejected as allegedly anticipated or obvious in view of Huish, U.S. Patent No. 6,057,280. This patent is commonly owned with the instant application.

The Examiner says the Huish '280 patent discloses embodiments within the scope of claims 30-46. The Examiner reasoned with respect to claims 30-46 that the Huish '280 patent discloses embodiments from about 1 to about 100% by weight of a C₁₆ or C₁₈ alpha sulfofatty acid ester or from about 1 to about 99 weight percent of C₁₆ sulfofatty acid ester and about 99 to 1 weight percent by weight C₁₈ sulfofatty acid. Claims 30-46 have been canceled. Applicants respond with respect to new claims 47-64

New claim 47 recites a detergent comprising an enriched methyl ester sulfonate composition comprising about 50 weight percent to about 75 weight percent of a first methyl ester sulfonate comprising different chain lengths, including a C₁₆ or C₁₈ methyl ester sulfonate, wherein the first methyl ester sulfonate is prepared from a natural fat or oil, and about 50 weight percent to about 25 weight percent of a second methyl ester sulfonate comprising predominantly

a C₁₆ or C₁₈ methyl ester sulfonate, the second methyl ester sulfonate enriching the C₁₆ or C₁₈ methyl ester sulfonate content of the first methyl ester sulfonate. New claim 58 recites a detergent comprising at least about 5 weight percent of a methyl ester sulfonate prepared from natural fats or oils and having a C₁₆-enriched methyl ester sulfonate content. Applicants submit that new claims 47 and 58, and the claims depending from these claims, are not anticipated in view of the Examiner's reasoning.

Applicants also submit new claims 47-64 are not obvious in view of the Huish '280 patent. The instant application and the '280 patent, at the time the invention of the instant application was made, as set forth in claims 47-64, were owned by Huish Detergents, Inc. See MPEP 706.02(1)(2).

Applicants therefore request the Examiner reconsider these rejections in view of new claims 47-64.

Rejections under 35 U.S.C. § 103(a)

Claims 30-46 stand rejected as allegedly obvious in view of EP 0 336 740 B1 ("EP '740"). The Examiner says EP '740 discloses a detergent composition comprising at least 50% by weight of a sulf fatty acid ester comprising C₁₂-C₁₈ carbon atoms and a surfactant system in an amount from 2 to 50% by weight (referring to pages 1-2). The Examiner also refers to pages 3-4 and examples 1-6 of EP '740.

Applicants respectfully disagree that claims 30-46 are obvious in view of EP '740. Those claims and new claims 47-64 are generally directed to methyl ester sulfonates. EP '740 discloses the use of fatty acid ester sulphonates where the ester group is at least C₄. *See, e.g.,* EP '740, page. 1, lines 44-57. EP '740 teaches away from the use of certain short chain fatty acid ester sulphonates in combination with certain low HLB nonionic surfactants. Further, as acknowledged in the office action, EP '740 does not specifically exemplify enriching the C₁₆ or C₁₈ content of a methyl ester sulfonate.

Applicants submit that the α -sulf fatty acid esters disclosed in EP '740 have a different structure (as discussed above) and different chain length composition because, *inter*

alia, Applicants' methyl ester sulfonate compositions are selectively enriched for certain chain lengths. Thus, EP '740 does not teach or suggest a detergent comprising an enriched methyl ester sulfonate composition comprising about 50 weight percent to about 75 weight percent of a first methyl ester sulfonate comprising different chain lengths, including a C₁₆ or C₁₈ methyl ester sulfonate, wherein the first methyl ester sulfonate is prepared from a natural fat or oil, and about 50 weight percent to about 25 weight percent of a second methyl ester sulfonate comprising predominantly a C₁₆ or C₁₈ methyl ester sulfonate, the second methyl ester sulfonate enriching the C₁₆ or C₁₈ methyl ester sulfonate content of the first methyl ester sulfonate. Similarly, EP '740 does not teach or suggest a detergent composition comprising at least about 5 weight percent of a methyl ester sulfonate prepared from natural fats or oils and having a C₁₆-enriched methyl ester sulfonate content.

Moreover, assuming *arguendo* the Examiner's argument that a *prima facie* case of obviousness exists when chemical compounds have very close structural similarities, Applicants' presently claimed compositions are distinguishable because they recite enrichment of C₁₆ or C₁₈ chain lengths of a methyl ester sulfonate derived from a natural fat or oil, not substitution of one compound for another. For the same reasons, assuming *arguendo* the Examiner's argument that a *prima facie* case of obviousness exists when chemical compounds are position isomers or homologs. Applicants' claims recite enrichment of C₁₆ or C₁₈ chain lengths of a methyl ester sulfonate derived from a natural fat or oil, not substitution of one chain length for another.

Applicants therefore request the Examiner reconsider this rejection in view of claims 47-64.

Additional Rejections Under 102(e) and 102(e)/103

Claims 30-46 stand rejected as allegedly anticipated or obvious over Ospinal, U.S. Patent No. 5,965,508. The Examiner says Ospinal discloses a soap bar composition comprising from about 30% to about 99% by weight of anionic alpha sulfonated alkyl esters, wherein the alkyl ester is a methyl ester having a mixture of C₁₂-C₁₈ and with 96% C₁₆ (referring to Table 17 of Ospinal). The Examiner asserts claims 30-46 are anticipated by Ospinal et al.

While Applicants disagree, in order to expedite prosecution of the instant application, claims 30-46 have been canceled. Applicants submit new claims 47-64 are not anticipated by Ospinal. Example 17 discloses a methyl ester of 1% C₁₂, 3% C₁₄, 96% C₁₆ and 1% C₁₈, which was sulfonated to produce a sulfonated methyl ester. Example 17 does not disclose a detergent composition comprising a mixture of methyl ester sulfonates derived from a natural fat or oil that is enriched for C₁₆ or C₁₈ chain lengths. Thus, Opsinal does not disclose a detergent comprising an enriched methyl ester sulfonate composition comprising about 50 weight percent to about 75 weight percent of a first methyl ester sulfonate comprising different chain lengths, including a C₁₆ or C₁₈ methyl ester sulfonate, wherein the first methyl ester sulfonate is prepared from a natural fat or oil, and about 50 weight percent to about 25 weight percent of a second methyl ester sulfonate comprising predominantly a C₁₆ or C₁₈ methyl ester sulfonate, the second methyl ester sulfonate enriching the C₁₆ or C₁₈ methyl ester sulfonate content of the first methyl ester sulfonate. Similarly, Ospinal does not disclose a detergent composition comprising at least about 5 weight percent of a methyl ester sulfonate prepared from natural fats or oils and having a C₁₆-enriched methyl ester sulfonate content.

Claims 47-64 also are not obvious in view of Ospinal. As acknowledged in the office action, Ospinal is silent about enriching with a C₁₆ methyl ester sulfonate. Example 17 discloses a methyl ester of 1% C₁₂, 3% C₁₄, 96% C₁₆ and 1% C₁₈, which was sulfonated to produce a sulfonated methyl ester. Applicants submit Example 17 does not teach a detergent having an enriched methyl ester sulfonate content in the ranges recited in the instant claims. Further, Applicants submit Ospinal does not suggest a detergent having an enriched methyl ester sulfonate content in the ranges recited in the instant claims. In particular, because Ospinal is silent about enriching with any methyl ester sulfonate chain length, Opsinal does not provide motivation to selectively modify a methyl ester sulfonate to have an enriched C₁₆ or C₁₈ methyl ester sulfonate content. Applicants therefore disagree that the presently claimed mixtures are taught and required by Ospinal. Further, the office action fails to suggest any motivation for the skilled artisan to selectively modify a methyl ester sulfonate to have an enriched C₁₆ or C₁₈ methyl ester sulfonate content. "The mere fact that the prior art may be modified in the manner

suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” *In re Fritch*, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992).

Applicants therefore request the Examiner reconsider this rejection in view of new claims 47-64.

Additional Rejections Under 102(b) and 102(b)/103

Claims 30-46 stand rejected as allegedly anticipated by Barone, U.S. Patent No. 4,705,644. The Examiner says Barone discloses a laundry bar having an alpha-sulfonated methyl ester having mixed fatty acids of C₈-C₂₀, sodium tripolyphosphate, sodium carboxy methyl cellulose, water and adjuncts (referring to col. 8, lines 40-60).

Applicants respectfully disagree that Barone anticipates claims 30-46 or new claims 47-64. Footnote 1 of the table at col. 8, lines 40-60 discloses the alpha-sulfo-higher fatty acid methyl ester is “mixed C₈₋₂₀ fatty acids, as from coconut oil.” Applicants submit this disclosure does not teach a detergent composition comprising a mixture of methyl ester sulfonates that is enriched for C₁₆ or C₁₈ chain lengths. Instead, the disclosed composition is one that could be enriched. Therefore, claims 47-64 are not anticipated by Barone.

The Examiner also asserts claims 30-46 are obvious in view of Barone. The Examiner reasons that it would have been obvious to comprise mixed carbon atoms in the claimed amount, because the mixtures are taught and required by the art of record.

Applicants respectfully disagree that claims 30-46 or new claims 47-64 are obvious in view of Barone. As discussed above, Footnote 1 of the table at col. 8, lines 40-60 discloses “mixed C₈₋₂₀ fatty acids, as from coconut oil.” Applicants submit there is no teaching or suggestion to modify that composition by enriching for C₁₆ or C₁₈ chain lengths. Further, Applicants disagree that methyl ester sulfonate from coconut oil has the same mixture of carbon atoms as the enriched compositions of the instant claims; for example, an enriched methyl ester sulfonate from coconut oil would have a higher amount of C₁₆ or C₁₈ chain lengths, relative to the un-enriched methyl ester sulfonate.

Moreover, assuming *arguendo*, the Examiner's argument that a *prima facie* case of obviousness exists when chemical compounds have very close structural similarities, Applicants submit the instant claims are distinguishable, reciting enrichment of C₁₆ or C₁₈ chain lengths, not substitution of compound for another.

Applicants therefore request the Examiner reconsider this rejection in view of claims 47-64.

Obviousness-Type Double Patenting

Claims 30-46 stand rejected under the judicially-created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 1-27 of U.S. Patent No. 6,683,039; claims 1 and 6-12 U.S. Patent No. 6,468,956; and claims 1-21 of U.S. Patent No. 6,780,830.

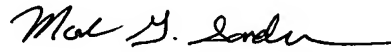
To the extent this rejection will also apply to new claims 47-64, and without acquiescing to the Examiner's rejection, Applicants will submit a terminal disclaimer solely for its statutory purpose of removing these obviousness type double patenting rejections, and not as an acquiescence on the merits of the rejections (*See Quad Environmental Technologies Corp. v. Union Sanitary District*, 946 F.2d 870, 874, 20 USPQ2d 1392, 1394-94 (Fed. Cir. 1991)). Applicants respectfully request that these rejections be held in abeyance until the claims are otherwise indicated as allowable by the Examiner.

Appl. No. 10/737,102
Amdt. dated March 28, 2005
Reply to Office Action of September 28, 2004

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



Mark G. Sandbaken, Ph.D.
Reg. No. 39,354

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
Attachments
MGS:sej
60367608 v1